



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,256	11/14/2001	Toshihisa Uchimoto	215898US2	6826
22850	7590	04/21/2005		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER PEREZ, ANGELICA	
			ART UNIT 2684	PAPER NUMBER
DATE MAILED: 04/21/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,256

Applicant(s)

UCHIMOTO, TOSHIHISA

Examiner

Perez M. Angelica

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/28/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 and 7-12 is/are allowed.
- 6) ☒ Claim(s) 6-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Regarding claims 1, 5, 9 and 10, the previous art of record teaches of a radio communication system and method comprising a maintenance terminal; a first base station configured to adjust the phase of a frame signal according to a GPS signal when a predetermined re-synchronization time is reached, and transmits the frame signal; and a subordinate base station which, upon reception of the frame signal from the first base station, is configured to adjust the phase of an internal frame signal to coincide with the thus received phase of the frame signal, where the first base station adjusts an internal clock operating according to a line clock based on a time matching signal transmitted from a maintenance terminal.

The previous art of record fails to teach where the first base station is further configured to **adjust an internal clock operating according to a line clock based on a time matching signal transmitted from the maintenance terminal.**

Claims 2-5 and 11-12 are dependent upon claims 1, 5, 9 and 10; therefore, the examiner gives the same reasons for allowance as set forth in claims 1, 5, 9 and 10.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claim Objections

Claim 2 is objected to because of the following informalities: There are two periods in the same claim (see pages 2 and 3). In the limitation that reads: " a subordinate base station which, upon reception...frame signal."; the period found on page 2 must be erased. Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seta (Seta, Mitsuru; US Patent No.: 6,483,825 B2) in view of Specification (Specification presented by applicant in application 09/897,256).

Regarding claim 1, Seta teaches of a radio communication method comprising (column 1, lines 7-11): adjusting a first base station frame signal phase according to a signal when a predetermined re-synchronization time is reached (column 3, lines 36-38; where "base station controller" corresponds to "absolute base station"), and transmitting the frame signal to a subordinate base station (column 3, lines 39-42); adjusting a subordinate base station internal frame signal phase when the frame signal from the first base station is received, to coincide with the received phase of the frame signal (columns 2 and 3, lines 67 and 4 and column 3, lines 43-45), and Seta does not

specifically teach of adjustment of the phase of the frame signal according to the GPS signal; and handing-over a call from the first base station to the subordinate base station, if the first base station detects that a call had been generated before the predetermined re-synchronization time was reached (column 2, lines 25-40).

In related art, the Specification teaches of adjustment of the phase of the frame signal according to the GPS signal (figure 5, items 3 and 5 and page 1, lines 12-23 e.g., "...an absolute base station which adjusts the phase of a framed signal based on the PPS signal received by the GPS receiver...).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Seta's communication system with the Specification's phase adjustment in order to later adjust a subordinate's internal phase signal with the received frame signal and achieve synchronization, as taught in the specification.

Regarding claim 7, Seta in view of the Specification teaches all the limitations of claim 6. Seta further teaches of forcibly cutting the call at the first base station, if a hand-over of the call from the first base station to the subordinate base station fails (column 2, lines 25-40).

Regarding claim 8, Seta in view of the Specification teaches all the limitations of claim 6. receiving, at the first base station, a frame signal from another base station existing in the same area, and adjusting the phase of the first base station frame signal to coincide with a phase of the thus received frame signal, if a hand-over of the call from the first base station to the subordinate base station fails (column 3, lines 23-30).

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 571-272-7885. The examiner can normally be reached on 7:00 a.m. - 3:30 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571)272-7882. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either the PAIR or Public PAIR. Status information

Art Unit: 2684

for unpublished applications is available through the Private PAIR only. For more information about the pair system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Information regarding Patent Application Information Retrieval (PAIR) system can be found at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.


Angelica Perez
(Examiner)


NAY MAUNG
SUPERVISORY PATENT EXAMINER

Art Unit 2684

April 14, 2005